

WHAT IS CLAIMED IS:

1. A game apparatus in which a virtual camera arranged in a three-dimensional game space is made to follow a target location determined by a location of a player character in the game space so that a behavior of the player character in the game space is displayed in a displaying means as a game image, comprising:

an input-information obtaining means for obtaining input information input through an operating means by a player at intervals of the predetermined number of frames in order to move said player character in said game space;

a location updating means for updating the location of said player character and said target location in said game space based on said input information;

a virtual-camera-location updating means for updating in order a location of said virtual camera in such a manner that a distance from said target location to a reference location determined in a predetermined manner toward the location of said virtual camera at a predetermined ratio is shortened irrespective of whether or not said player character has moved; and

a game-image generating means for generating the game image based on the updated location of said player character and location of said virtual camera.

2. A game apparatus according to claim 1, further comprising

a virtual-camera setting means for arranging the virtual camera in a location determined in a predetermined manner toward a point of regard, and setting a direction of said virtual camera in such a manner as to face said point of regard; wherein

said reference location is a location of said point of regard,

said virtual-camera-location updating means updates in order the location of said virtual camera by updating in order the location of said point of regard in such a manner that a distance from said target location to the location of said point of regard is shortened

at a predetermined ratio irrespective of whether or not said player character has moved.

3. A game apparatus according to claim 1, further comprising

a virtual-camera setting means for arranging the virtual camera in a location determined in a predetermined manner toward a point of regard, and setting a direction of said virtual camera in such a manner as to face said point of regard; wherein

said reference location is a location of said virtual camera,

said target location is an initial location of said virtual camera that moves in conjunction with said player character,

said virtual-camera-location updating means updates in order the location of said virtual camera in such a manner that a distance from said target location to the location of said virtual camera is shortened at a predetermined ratio irrespective of whether or not said player character has moved.

4. A game apparatus according to claim 1, further comprising

a distance determining means for setting a maximum distance that uses said target location as a reference, and determining whether or not the distance from the target location to said reference location is rendered longer than said maximum distance; and

a forcedly updating means for forcedly updating said reference location to a location within the maximum distance that uses said target location as a reference when determined by said distance determining means that the distance is rendered longer than said maximum distance.

5. A game apparatus according to claim 4, wherein

said camera-location updating means includes a reference-location calculating means for calculating an updated reference location, and

said distance determining means determines whether or not said updated reference location calculated by said reference-location calculating means is rendered longer than

the maximum distance from said target location.

6. A storing medium that stores a control program of a virtual camera executed by a computer of a game apparatus in which the virtual camera arranged in a three-dimensional game space is made to follow a target location determined by a location of a player character in the game space so that a behavior of the player character in the game space is displayed in a displaying means as a game image, the control program of said virtual camera allows said computer to be functioned as following means of:

an input-information obtaining means for obtaining input information input through an operating means by a player at intervals of the predetermined number of frames in order to move said player character in said game space;

a location updating means for updating the location of said player character and said target location in said game space based on said input information;

a virtual-camera-location updating means for updating in order a location of said virtual camera in such a manner that a distance from said target location to a reference location determined in a predetermined manner toward the location of said virtual camera at a predetermined ratio is shortened irrespective of whether or not said player character has moved; and

a game-image generating means for generating the game image based on the updated location of said player character and location of said virtual camera.

7. A method of a virtual camera in a game apparatus in which the virtual camera arranged in a three-dimensional game space is made to follow a target location determined by a location of a player character in the game space so that a behavior of the player character in the game space is displayed in a displaying means as a game image, comprising following steps of:

(a) obtaining input information input through an operating means by a player at intervals of the predetermined number of frames in order to move said player character in said game space,

5 (b) updating the location of said player character and said target location in said game space based on said input information,

(c) updating in order a location of said virtual camera in such a manner that a distance from said target location to a reference location determined in a predetermined manner toward the location of said virtual camera at a predetermined ratio is shortened irrespective of whether or not said player character has moved, and

10 (d) generating the game image based on the updated location of said player character and location of said virtual camera.